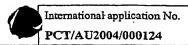
INTERMATIONAL SEARCH REPORT

International application No. PCT/AU2004/000124

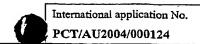
| | | | 1 CITAC2004 | | | | | |
|--|---|--|--|-----------------------|--|--|--|--|
| A. | CLASSIFICATION OF SUBJECT MAT | TER | 1 | | | | | |
| Int. Cl. 7: | F01B 5/00, 13/04; F02B 75/26 | | | | | | | |
| According to | International Patent Classification (IPC) | or to bo | th national classification and IPC | | | | | |
| В. | FIELDS SEARCHED | | | | | | | |
| | mentation searched (classification system foll nder "Electronic database consulted" | owed by | classification symbols) | | | | | |
| | searched other than minimum documentation 1B 5/00, 13/-, F02B 75/26 | to the e | xtent that such documents are included in the fields searc | hed | | | | |
| | base consulted during the international search B 5/-, 9/-, 13/-; F02B 57/-, 75/26, 75/3 | | of data base and, where practicable, search terms used) keywords; gear, pinion and crank | | | | | |
| C. | DOCUMENTS CONSIDERED TO BE REL | EVANT | | | | | | |
| Category* | Citation of document, with indication, | where a | ppropriate, of the relevant passages | Relevant to claim No. | | | | |
| | AU 200020827B2 (728019) (HUA | | | 1 10 16 15 | | | | |
| X Y | Figures 1,2 and accompanying descriptions 1,2 and accompanying descriptions. | | | 1-10, 16,17 | | | | |
| • | 1 igues 1,2 una accompanymig acci | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | • | 11 15, 15 | | | | |
| | DE 3023363A1 (SCHULTZ) 7 Jan | uary 1 | 982 | | | | | |
| Y | | | | | | | | |
| | | | | | | | | |
| | US 5967102A (HUANG) 19 Octob | | | | | | | |
| х | Figures 1-5, 9, 10 and accompanying | ng desc | eription | 1-10, 16, 17 | | | | |
| | EP 0964136A1 (HUANG) 15 December 1999 | | | | | | | |
| X | X Figures 1-5, 9, 10 and accompanying description | | | | | | | |
| X I | Further documents are listed in the co | ntinuat | ion of Box C X See patent family and | lex ' | | | | |
| "A" docume | categories of cited documents: ent defining the general state of the art which is sidered to be of particular relevance | Lu | later document published after the international filing date or properties of the conflict with the application but cited to understand the principulation invention | | | | | |
| "E" earlier application or patent but published on or after the "X" document of particular relevance; the claimed invention cannot be considered or cannot be considered to involve an inventive step when the document is taken | | | | | | | | |
| "L" document which may throw doubts on priority claim(s) "Y" document of particular relevance; the claimed invention cannot be consinvolve an inventive step when the document is combined with one or a | | | | | | | | |
| another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition | | | such documents, such combination being obvious to a person document member of the same patent family | skilled in the art | | | | |
| "P" docume | r means ent published prior to the international filing date er than the priority date claimed | "&" | | | | | | |
| | tual completion of the international search | | Date of mailing of the international search report | 1 3 APR 200 | | | | |
| 2 April 200 | | | Authorized officer | 1. 0 AI II 100 | | | | |
| , | iling address of the ISA/AU | | Authorized officer | • | | | | |
| AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au | | | ASANKA PERERA | | | | | |
| Facsimile No. (02) 6285 3929 Telephone No : (02) 6283 2373 | | | | | | | | |

| (Continuati | | Relevant to |
|-------------|--|--------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | claim No. |
| | US 2990820A (SAIJO) 4 July 1961 | |
| X | Figure 1 and accompanying description | 1-10, 16, 17 |
| | US 4741300A (BENSON) 3 May 1988 | • |
| x | Figures 1, 7 and accompanying description | 1-10, 16, 17 |
| | CH 376317A (RYSER) 15 May 1964 | |
| X | The whole document | 1-10, 16, 1 |
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| Box No. II | Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet) | | | | |
|--|--|--|--|--|--|
| This interna reasons: | This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: | | | | |
| 1. | Claims Nos.: | | | | |
| | because they relate to subject matter not required to be searched by this Authority, namely: | | | | |
| | Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: | | | | |
| | | | | | |
| 3. | Claims Nos.: | | | | |
| | because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a) | | | | |
| Box No. III | Observations where unity of invention is lacking (Continuation of item 3 of first sheet) | | | | |
| | This International Searching Authority found multiple inventions in this international application, as follows: See Supplemental Box | | | | |
| | As all required additional search fees were timely paid by the applicant, this international search report covers all | | | | |
| 1. | searchable claims. | | | | |
| 2. X | 2. X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. | | | | |
| 3. | A selection of the remainded distance around force grown timely maid by the configuration this intermetional search report | | | | |
| No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: | | | | | |
| Remark o | a Protest The additional search fees were accompanied by the applicant's protest. | | | | |
| | No protest accompanied the payment of additional search fees. | | | | |
| L | | | | | |



Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: III

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

- 1. Claims 1-10, 16 and 17 are directed to an engine. It is considered that a cylinder block provided with reciprocating pistons and rotating relative to a fixed portion comprises a first "special technical feature".
- 2. Claims 11-15 and 18 are directed to a method of effecting a cycle of an engine. It is considered that a working fluid in a cylinder bore expands and rotating the cylinder block by means of a pinion gear connected to a crank shaft and a ring gear connected to a fixed portion comprises a second "special technical feature".

These groups are not so linked as to form a single general inventive concept, that is, they do not have any common inventive features, which define a contribution over the prior art. The common concept linking together these groups of claims is a rotating cylinder block. However this concept is not novel in the light of AU 200020827B2. Therefore these claims lack unity a posteriori.

INTERNATIONAL SEARCH REPORT

ation on patent family members

International application No. PCT/AU2004/000124

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| | t Document Cited in Search Report | | | Patent Family Member | |
|----|--------------------------------------|------|--------|----------------------|---------------------------------------|
| AU | 2082700 | AU | 728019 | | |
| DE | 3023363 | NONE | | | |
| US | 5967102 . | NONE | | | · |
| EP | 0964136 | NONE | | | |
| US | 2990820 | NONE | | | |
| US | 4741300 | NONE | | | |
| CH | 376317 | NONE | | | · · · · · · · · · · · · · · · · · · · |
| | | | | | |
| | | | | | END OF ANNEX |